

Potential Impact of Concept 3 on the Atlanta Region

Transit Planning Board

June 26, 2008

Overview

- Background
- Ridership
- Accessibility
- Safety
- Congestion
- Initial Conclusions

Background

- Based upon Board request for impact analysis
- Follow-up to report from May
- ARC Staff performed scenario testing allowing population and employment to shift by 5, 10, 15, and 20%

Initial Estimated Ridership

Measure	Actual 2005	2008 Model Est.	E6 2030 Est.	2030 Concept 3 Est.	Concept 3 5% Pop./ Emp. Shift	Concept 3 10% Pop./ Emp. Shift	Concept 3 15% Pop./ Emp. Shift	Concept 3 20% Pop./ Emp. Shift
Average Daily Weekday Trips	495,730	434,000	716,000	832,000	1,017,000	1,226,000	1,464,000	1,800,000
Est. Annual Trips (1,000,000)	150	129	213	248	303	365	436	537
Est. Annual Passenger Miles (1,000,000)	811	758	1,339	1,589	1,974	2,421	2,927	3,643

^[1] Source: NTD 2005 for MARTA, GRTA, CCT, GCT, City of Canton compiled by the Transit Planning Board

Accessibility (1)

- Carl Vinson Institute Study – Economic Impact of MARTA on Atlanta is primarily labor related

	2001	2002	2003	2004	2005	2006
Estimated Economic Impact of MARTA (Millions \$)						
	\$1,333	\$1,563	\$1,571	\$1,543	\$1,589	\$1,630
Total Annual Operating Costs for the Atlanta Regional Transit System (Millions \$)						
	\$344	\$313	\$337	\$332	\$338	\$334
Total Annual Capital Costs for the Atlanta Regional Transit System (Millions \$)						
	\$268	\$248	\$255	\$220	\$183	\$221
Total Annual Capital and Operating Costs for the Atlanta Regional Transit System (Millions \$)						
	\$612	\$561	\$592	\$552	\$521	\$555
Ratio of Estimated Economic Impact and Total Costs						
	2.2	2.9	2.7	2.8	3.0	2.9

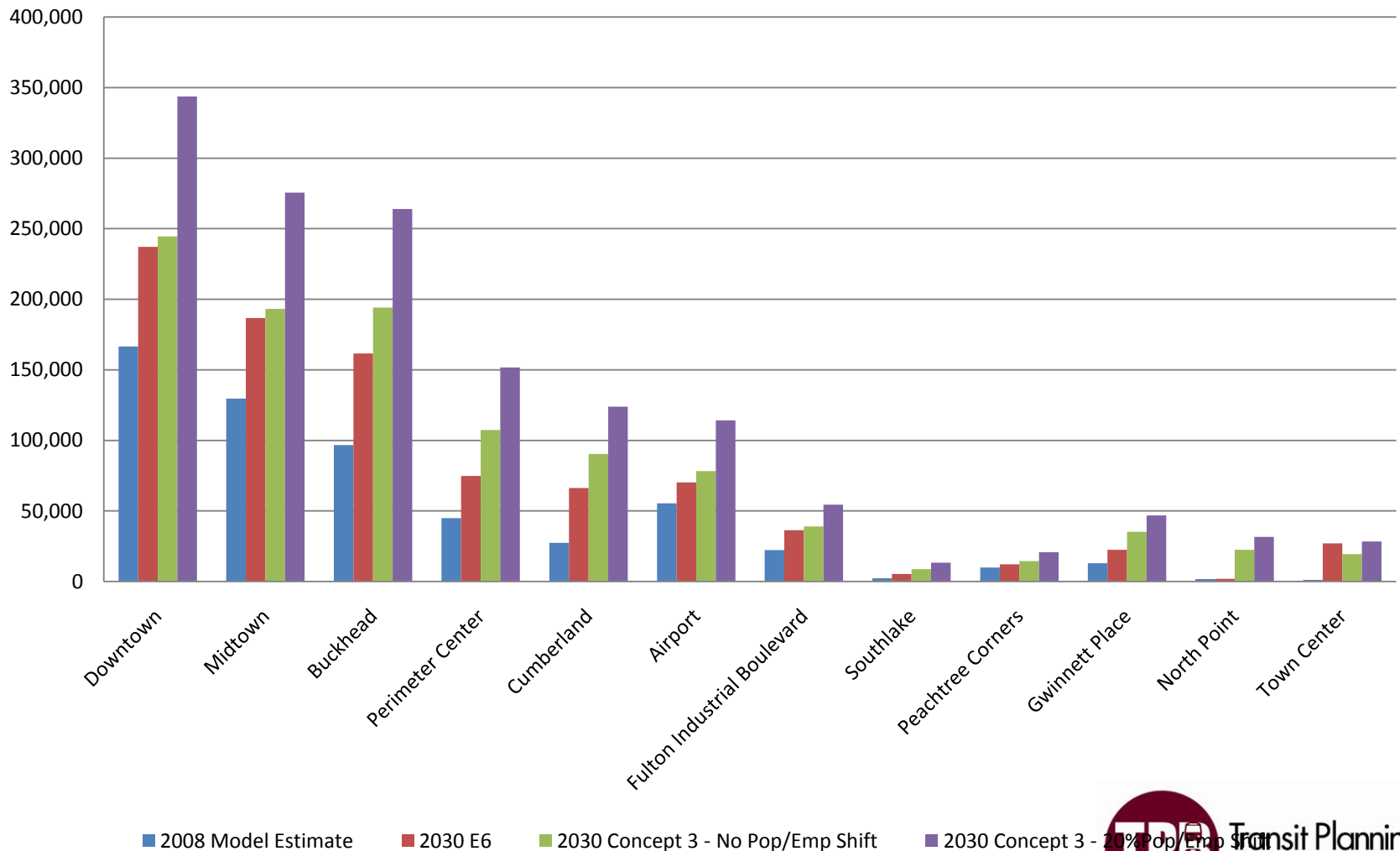
[1] Tanner, Thomas C. and Adams Jones. The Economic Impact of the Metropolitan Atlanta Rapid Transit Authority: An analysis of the impact of MARTA Operations on and around the service delivery region. Georgia Economic Modeling System, Carl Vinson Institute of Government, The University of Georgia. Athens, GA. May, 2007.

[2] Source: NTD 2006 for MARTA, GRTA, CCT, GCT, City of Canton compiled by the Transit Planning Board

[3] Source: NTD 2006 for MARTA, GRTA, CCT, GCT, City of Canton compiled by the Transit Planning Board

Accessibility (2)

Number of Households within 30-min Trip by Transit



2008 Model Estimate

2030 E6

2030 Concept 3 - No Pop/Emp Shift

2030 Concept 3 - 20% Pop/Emp Shift



Transit Planning Board
WORKING TOGETHER — CONNECTING OUR REGION

Safety

E6	Concept 3 – No Pop/ Emp. Shift	Concept 3 – 5% Pop/ Emp. Shift	Concept 3 – 10% Pop/ Emp. Shift	Concept 3 – 15% Pop/ Emp. Shift	Concept 3 – 20% Pop/ Emp. Shift
Estimated Avoided Fatalities					
15	17	21	26	31	39
Estimated Avoided Injuries					
752	990	1,253	1,554	1,899	2,394
Estimated Value of Avoided Fatalities (Millions \$)					
\$47.6	\$53.4	\$66.9	\$82.7	\$100.5	\$125.8
Estimated Value of Avoided Injuries (Millions \$)					
\$51.2	\$67.5	\$85.4	\$105.9	\$129.5	\$163.2
Total Estimated Value of Avoided Injuries and Fatalities (Millions \$)					
\$98.8	\$120.9	\$152.3	\$188.6	\$230.0	\$289.0



Rough Congestion Potential

E6	Concept 3 – No Pop/ Emp. Shift	Concept 3 – 5% Pop/ Emp. Shift	Concept 3 – 10% Pop/ Emp. Shift	Concept 3 – 15% Pop/ Emp. Shift	Concept 3 – 20% Pop/ Emp. Shift
Estimated Annual Passenger Trips (Millions of Trips)					
213	248	303	365	436	536
Estimated Potential Annual Value of Congestion Relief (Millions \$2005)					
\$292	\$340	\$416	\$501	\$598	\$736

- Based Upon Average Congestion Relief per Trip of \$1.37 / trip from Texas Transportation Institute Urban Mobility Report
- Estimate is a rough range of potential relief

Initial Conclusions

- Ridership between 832,000 and 1,800,000
- Increased accessibility to the major employment centers
- Estimated value of annual congestion mitigation benefits between \$340 and \$736 million
- Estimated 15 to 40 fewer annual highway fatalities

Next Steps

- Regional Impact of Roadway (Arterial and Freeway Network)
- Finalize Cost Estimates to Compare with Benefits
- Anticipated in July